

**TITLE : COMPUTER ARMREST**

**FIELD OF THE INVENTION:**

This invention relates to a computer armrest, particularly to one preventing a computer-using worker from getting occupational harm.

5       **BACKGROUND OF THE INVENTION:**

As for equipment for preventing computer-using workers from preventing them from occupational harm, a US patent No. 5,074,501 disclosed an elbow supporter for workers using computers to rest the elbow thereon, using two always-parallel  
10 arms for adjusting the horizontal height of the elbow supporter so that a user can place the elbow stably and comfortably thereon. This elbow supporter is designed to have an objective and function of horizontal adjustment and tight fixing with a computer table for the elbow supporter. But it only has a bolt for adjusting the two  
15 parallel arms so the adjustable angle and the horizontal position are quite limited, impossible to collapse it under the table when not used.

And another US patent No. 4,592,526 disclosed one, which has two arms combined vertically, with one at the upper and the  
20 other at the lower, and corresponding toothed surfaces at the joint, with an disadvantage that each arm can only swing right and left in adjusting the position of the two arms. Therefore, it is limited in its use, very inconvenient.

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## SUMMARY OF THE INVENTION

The objective of the invention is to offer a computer armrest possible to prevent a computer using worker from getting occupational harm, and easy to collapsing it under a computer table, not taking any space on the table  
5 when not used.

One of the feature of the invention is an elbow supporter held by a connect arm and moving freely together with the elbow of a user, letting the elbow and the arm held naturally.

The other objective of the invention is to offer a computer armrest  
10 having the connect arm with its two ends each provided with an adjusting bolt permitting the elbow supporter adjusted in multi-directions and its height.

## BRIEF DESCRIPTION OF DRAWINGS

This invention will be better understood by referring to the  
15 accompanying drawings, wherein:

Figure 1 is an exploded perspective view of a computer armrest in the present invention;

Figure 2 is a side view of a first stage of movement of the computer armrest in the present invention;

20 Figure 3 is a side view of a second stage of movemtn of the computer armrest in the present invention;

Figure 4 is a side view of the computer armrest in the present invention;

25 Figure 5 is an upper view the computer armrest in moving condition in the present invention;

Figure 6 is a cross-sectional view of an adjusting bolt in a first adjusting condition in the present invention; and,

Figure 7 is a cross-sectional view of an adjusting bolt in a second adjusting condition in the present invention.

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#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of a computer armrest in the present invention, as shown in Fig. 1, includes an elbow supporter  
10 1, an upper arm 2, a pinch base 3, a mouse pad 4, a front turning base 5, a rear turning base 6, a connect arm 7 as main components combined together.

The elbow supporter 1 has a convex upper surface 10 to match with ergonomics, a soft pad 11 laid on the upper surface 10,  
15 and fitted through by a first shaft 20 of the upper arm 2 to turn around freely.

The upper arm 2 has the first shaft 2 to fit in the elbow supporter 1 to let the elbow supporter move freely, and a second shaft 21 extending downward to combine with the rear turning  
20 base 6.

The pinch base 3 consists of an upper pinch base 30 and a lower pinch base 31, and the upper and the lower pinch base 30 have respectively a vertical circular toothed surface 300 and 301 to engage with each other for adjustment. The upper and the lower  
25 pinch base 30 and 31 further respectively have a vertical slot 301

and a threaded hole 311, as shown in Figs. 2 and 3, for a bolt 32 to fit through and screw with to adjust the combined height of the two half bases 30 and 31 so as to change the height of the mouse pad 4. The upper pinch base 30 further has a shaft 33 fixed on an upper surface to fit in either of two shaft holes 40 and 41 of the mouse pad 4, permitting the mouse pad 4 turn freely as shown in Figs. 4 and 5. The lower pinch base 31 has an upper surface 311 and a threaded hole 314 in the upper surface 311 for a bolt 340 of the pinch plate 34 to screw with so as to adjust the distance between the surface of the pinch plate 34 and a pinch surface 36 of the upper pinch base 30 according to the thickness of the object to be sandwiched for effectuating stable pinching. The lower pinch base 31 further has a turning shaft base 315 with an opening 316 in a rear portion for combining with the front turning base 5.

The front turning base 5 has two shaft bases 50, 51 with an intermediate opening between them, with the shaft base 50 inserting in the opening 316 and with the lower shaft base 51 positioning under the shaft turning base 315. Then a shaft 52 extends through the lower shaft base 51, the turning shaft base 315 and the turning shaft base 50 from under, and then closed with a shaft cap 53 with two washers 520, 521 to combine the front turning base 5 stably. The front turning base 5 further has a vertical circular toothed surface 54 formed in an inner wall and a threaded hole 55 in the toothed surface 54.

The rear turning base 6 has two shaft bases 60, 61

respectively with a center hole for the shaft 21 of the connect arm 2 to fit therein and also pass through a gasket 62 and a washer 63, and then closed with a shaft cap 64 so as to position the rear turning base 6 stably. The rear turning base 6 further has a vertical circular toothed surface 65 and a threaded hole 66 in the toothed surface 65.

The connect arm 7 has a front vertical circular toothed surface 70 and a rear vertical circular toothed surface 71 to engage respectively with the toothed surfaces 54 and 65 of the upper and the lower turning base 5 and 6, and a threaded hole 700 and 710 as shown in Fig. 6 and 7 for an adjusting bolt 72 and 73 to fit through and also through a spring 720 and 730, then screw with the threaded holes 55, 65 and then locked by helical spring lock washers 550 and 650, combining the connect arm 7 movably with the front and the rear turning base 5 and 6, and limiting the looseness and tightness of the adjusting bolts 72 and 73. Changing only the combining position of the connect arm 7 with the front and the rear turning base 5 and 6 can change the position of the elbow supporter 1 to correspond with the elbow of a user. Further, the elbow supporter 1 can be collapsed under a computer table not to take the space on the table.

Further, the two adjusting bolts 72, 73 of the connect arm 7 enable the height of the elbow supporter adjusted and the horizontal position also adjusted, in accordance with the habit of a user, the height of the key board, and the need of a user to get

comfort in using a computer.

While the preferred embodiment of the invention has been described above, it will be recognized and understood that various modifications may be made and the appended claims are intended  
5 to cover all such modifications that may fall within the spirit and scope of the invention.